

question, in the insane who were subjected to inspection, that, although the number of persons observed is less than we might have wished, we unhesitatingly answer the question in the affirmative. It is to be hoped, however, that the physicians of some of our large public institutions may institute observations, and prosecute the subject to a more strongly fortified demonstration.

Supposing, then, the question to be proved beyond the shadow of a doubt, how far is it justifiable to place reliance upon the fact in prosecuting an inquiry into the mental condition of an individual? We must recollect that, although the fact be proved, yet that fact, or its corresponding rule, is but a general one, to which, when applied to individuals, there are many exceptions. Hence our confidence in it as a test of mental disease will be materially shaken. And when it is recollected that the circulation differs greatly in different persons, even in health, and that there is a vast diversity of influences which, in health or disease, may determine the acceleration or diminution of its rapidity, we shall find that but little value can be placed upon it as a test in the case in question. Where life may be saved or prolonged by the decision, humanity and philanthropy will appeal for all the weight which the demonstrated truth can yield; but if condemnation and consequent death await the result which this truth may determine, the benevolent physician will be cautious in giving it any consideration that is not supported by tests of a more certain, a less variable and a less fluctuating character.

ART. IV.—*Statistics and Cases of Midwifery; compiled from the Records of the Philadelphia Hospital, Blockley.* By GEO. N. BURWELL, M. D., Resident Physician.

THE following statistics and cases are drawn up from the records of the obstetrical wards of the Philadelphia Hospital, Blockley. They comprise the cases of labour which occurred from October 1835 to January 1844 inclusive, a period of eight and a half years.

The wards are under the immediate care of the resident physicians of the hospital, who are generally young men, just graduated, and who very rarely serve more than one year. They attend the cases in rotation and record them. There are also two obstetricians attached to the wards, upon whom the residents call for advice and assistance in cases of difficulty. At no other time do they make a *practice* of visiting the wards.

I have no doubt of the entire correctness of the records as far as they go. Their great fault is a want of completeness; for instance, there has not been

care enough exercised in ascertaining the date of the last menstruation,—the number of previous labours, of children and miscarriages,—the duration of the different stages of labour and the subsequent progress and sickness, if any, of both mother and child during the month. This last point has never been, nor is now, made a subject of record. It certainly ought to be, and in my estimation it is one of the most important particulars.

There is a manifest want of statistics on this subject in this country. While from the European hospitals full and elaborate reports are constantly published, little or nothing of the kind emanates from our public institutions or from private practitioners. Dr. Metcalf, in a recent and very interesting article in this Journal, has set an example, which ought to be followed by the practitioners of midwifery in the different sections of our country, until a mass of facts are obtained, which will be valuable for comparison with each other and with those furnished from Europe, and for the establishment of rules to guide us in cases of doubt and danger.

The class of patients in this hospital are very different from those met with in private practice. Three-fifths of them, or 334 out of 567, where this point was noted, were single women, (with occasional exceptions) with their first-child. Most of them are generally healthy, hearty women. The married women are those who, from being left widows, or from the desertion or poverty of their husbands have been obliged to seek this charity during their confinement. Except a number of vagrants and prostitutes, nearly all of both classes belong to the poor and labouring portions of the community.

The birth places of these patients, as far as ascertained, were as follows: Pennsylvania 200; other states of the U. S. 125; Ireland, 126; England 25; Germany, 42; France, 3; Canada, 2; ocean, 4; unknown, 61.

I. The actual duration of gestation was ascertained in the following cases by the women being able to state "from some particular circumstances" the date of conception.

1. S. R. became pregnant Nov. 23, 1835; child born Aug. 26, 1836; duration 277 days.

2. E. R. became pregnant March 18, 1836; child born Dec. 15, 1836; duration 272 days.

3. M. G. became pregnant April 1, 1836; child born Jan. 2, 1837; duration 276 days.

4. E. B. became pregnant April 10, 1836; child born Jan. 12, 1837; duration 277 days.

5. H. R. became pregnant Dec. 24, 1842; child born Sept. 26, 1843; duration 276 days.

6. A. M. became pregnant, March 30, 1843; child born Dec. 30, 1843; duration 275 days.

These agree well enough with the duration of pregnancy generally given. We occasionally see women who are perfectly certain of having passed the usual time of gestation and will give the reasons with a clearness and posi-

tiveness, that on other subjects would be considered conclusive. There is once case in the records of this kind where the woman was confident that she became pregnant the first or second week in February, 1836, and was not confined until December 21, 1836, a period of nine and a half months at least. She was a married woman and this her fifth child.

The following is an instance where gestation was not eight months and yet the woman was delivered of a fine healthy child, weighing six pounds twelve ounces (female).

She was married, and had menstruated about Christmas, 1836; her husband returned from abroad New Years day, 1837, and was home two days, when he went away again for three months; this would give 233 or 234 days as the duration of her pregnancy.

The relation between the time of the last menstruation and the birth of the child is an interesting one. It was noted in 259 cases, as follows:

In 1 case menstruation occurred about $5\frac{1}{2}$ months before delivery.

| | | | | | | | |
|---------|---|---|---|--------------------|---|---|---|
| 4 cases | " | " | " | 6 | " | " | " |
| 1 case | " | " | " | $6\frac{1}{2}$ | " | " | " |
| 9 cases | " | " | " | 7 | " | " | " |
| 2 " | " | " | " | $7\frac{1}{2}$ | " | " | " |
| 24 " | " | " | " | 8 | " | " | " |
| 24 " | " | " | " | $8\frac{1}{2}$ | " | " | " |
| 138 " | " | " | " | 9 | " | " | " |
| 26 " | " | " | " | $9\frac{1}{2}$ | " | " | " |
| 18 " | " | " | " | 10 | " | " | " |
| 11 " | " | " | " | 11 months and over | " | " | " |

1 case " " at irregular intervals throughout gestation, the appearance of the catamenia being preceded by violent neuralgic pains.

The points of interest in this table are, 1st, the comparatively small number of cases where the intervening time has been less than 8 months; 18 in 259 cases, or in the proportion of 1 to 15; of these 18 cases, labour came on in nine of them at seven months. This large proportion taken in connection with the results would seem to indicate a disposition of nature to expel the child at the seventh month of utero-gestation. The question would arise also whether the presentation of the child had any thing to do with this. *The case at $5\frac{1}{2}$ months* was a woman who dated her pregnancy nine months before delivery, but who continued to menstruate regularly until this short period before her accouchement. Child healthy and weighed 6 pounds 11 ounces.

In the cases at 6 months the children were all born alive, and had the average weight of nearly $6\frac{1}{2}$ pounds.

In the case at the $6\frac{1}{2}$ month, the child had evidently been dead some time before delivery, and was in all probability premature.

Now of those at 7 months we find *two* cases where, judging from the weight of the children (6 pounds and $9\frac{1}{2}$ pounds), the duration of pregnancy had probably arrived, *two* cases where the children were small, (weight 3 and 4 pounds,) and *five* cases of still-born children.

The positions of the still-born children were 1, of the sixth position of the vertex (child putrid); 1 of the left shoulder; 1 of the first breech; 1 of the second breech; and 1 of the feet.

One child only presented signs of having been dead for some time, and one mother only had had previous miscarriages.

One of the two cases at $7\frac{1}{2}$ months was a still-born child, "evidently dead for some time," the other was a small female child only 16 inches long and weighing $6\frac{1}{2}$ pounds—probably premature.

The second point of interest in this table is the large number of cases at eight and eight and a half months. The natural duration of gestation being nine months, it must follow that these were either premature or the catamenia must have appeared once after conception.

The number of cases of labour where menstruation had not taken place for eleven months or longer previous to delivery is sufficient to show that regularity of the catamenia is not always necessary to conception. There is one case in this number where the patient had not menstruated for eleven years previously.

II. *Presentation and position.*—Of 588 labours there were 598 children. They presented as follows:—

| | | | | | |
|--|---|---|---|--|--------------------------------|
| 410 cases of the 1st position of the vertex, | | | | | |
| 76 | " | " | " | 2d | " |
| 7 | " | " | " | 3d | " |
| 17 | " | " | " | 4th | " |
| 5 | " | " | " | 5th | " |
| 1 | " | " | " | 6th | " |
| 1 | " | " | " | 4th position of the face, | |
| 2 | " | " | " | presentation of the anterior fontanelle, | |
| 1 | " | " | " | " | side of the head, |
| 1 | " | " | " | " | head in a transverse position, |
| 2 | " | " | " | " | shoulder, |
| 17 | " | " | " | " | head (position not defined), |
| 9 | " | " | " | 1st position of the breech, | |
| 4 | " | " | " | 2d | " |
| 3 | " | " | " | 4th | " |
| 1 | " | " | " | 5th | " |
| 4 | " | " | " | 1st | feet, |
| 1 | " | " | " | 2d | " |
| 1 | " | " | " | 3d | " |
| 1 | " | " | " | 4th | " |
| 2 | " | " | " | presentation of the feet (position not defined), | |
| 32 | " | " | " | unknown. | |

The right hand came down applied to the right side of the head in two cases; both the first position of the vertex.

One of the first vertex positions was complicated with partial placenta prævia.

In the following report of cases and complications, I do not refer to the occurrence of hemorrhage, convulsions, or of adherent placenta. These points will be made the subject of special remark hereafter.

The following is the first case, which I give, as in all the cases which follow, without expressing any opinion upon the treatment further than an occasional query.

1. The patient was a short, thick-set woman of a leucophlegmatic temperament. On the first examination the membranes were found ruptured, and the os uteri dilated to the extent of an inch and a half, soft, very thick and somewhat dilatable. The foetal heart heard pulsating 140 in a minute. The pains were very inefficient and the dilatation proceeded slowly, half an inch in two hours. "On account of the absence of pain it was thought advisable to administer ergot, which was given in doses of fifteen grains every half hour until forty-five grains were given without any apparent effect." Three hours after the last dose, vomiting of a dark-coloured fluid took place, which continued from time to time throughout the whole period of labour. In five hours more the os uteri was fully dilated, and the head had descended into the cavity of the pelvis and rotation taken place. "Prostration now suddenly occurred with complete inertia of the uterus," and which rendered it necessary to resort to stimuli; carb. ammonia and wine-whey were given. During the next five hours the patient continued to sink, and immediate delivery being thought indispensably necessary, an attempt was made to apply the forceps, but owing to some difficulty in their application, the nature of which is not stated, they were laid aside. The exhaustion now becoming extreme, with incessant vomiting, a sinapism was applied to the epigastrium, with flying sinapisms to the extremities, and hot brandy-toddy was substituted for the wine-whey. In two hours more the attending obstetrician who had been sent for, arrived. The woman had then "a pulse of 140, scarcely perceptible; constant hiccough and vomiting; cold extremities with lividity."—He advised that if possible sleep should be induced and directed tr. opii gtt. xxx. q. h. Nine hours more passed, when craniotomy being deemed the only resource, it was performed by the residents in attendance and the woman in due time delivered. What was the cause of this sudden prostration? Could it have been the ergot given so early in the labour, and "without apparent effect?"

2. The next case was the application of the forceps to facilitate delivery in labour complicated with convulsions. See case 4, p. 336.

3. This patient was a black girl, 16 years old, of small stature; she had some pains on Saturday, Sept. 16, which were of a trifling character and intermittent; the os uteri had attained a dilatation of about two inches in diameter; she suffered but little pain until Tuesday night when the membranes ruptured.

Wednesday.—Pains few and feeble; pulse and spirits good.

Thursday.—The attending accoucheur saw her by request, and thought that true labour had not commenced. Friday and Saturday, continued about the same: os uteri fully dilated Saturday morning; no pain of consequence; frictions, stimulating injections and ergot given to excite

them, but without effect; the head, however, descended into the cavity of the pelvis; her pulse was first noticed to fail about 7 P. M.; and as she seemed disposed to sleep, a dose of solution of morphia was given in the hope of her benefiting by rest. 8 P. M., had been dozing; no pain; was pulseness at the wrist; voice of good strength: a fluidrachm of the sol. of morphia given.

Sunday, 1 A. M.—Pulse perceptible but very small; no pain; had been sleeping some. 7 A. M. Patient wandering, pulse very feeble; the forceps could not be applied on account of the impaction of the head at the brim of the pelvis. The child being dead was then taken away by cephalotomy. The umbilical cord and placenta were in a state of sphacelation. The uterus did not contract down after the delivery of the placenta, which was adherent and had to be delivered by the introduction of the hand; no hæmorrhage ensued; duration of the labour eight and a half days.

The woman was placed under a full tonic course, with beef tea, &c., but she never rallied much, and died at the end of three days.

4. The subject of this case was a black woman, 22 years of age, in labour with her second child. When the physician was called, she was found just dead, having been in labour five hours altogether; all means for her resuscitation proved unavailing. She had enjoyed good health generally, and had no convulsions or other symptoms which could account for death, nor was any cause discovered on a minute and careful post-mortem examination.

The head of the child was in the cavity of the pelvis in the second position of the vertex, and was extracted by the forceps, dead.

5. In the following interesting case the position of the head was the third of the vertex. The patient was a feeble Dutch woman of very small stature, with her first child, at the age of about thirty-five years. She suffered from pains in the back and sides for three weeks before confinement, and when in actual labour it was two and a half days before the os uteri dilated enough to slip up on the head, the membranes having ruptured as the first act of her confinement. The pains during the dilatation of the os uteri were at times severe, very annoying, and accompanied with much prostration. Three hours after the dilatation of the os uteri it was attempted to apply the forceps and bring down the head, but unsuccessfully. The powers of the woman during these efforts failed rapidly, and required supporting by stimulants. Her pulse rose to 160, fluttering, extremities cold and face sunken. The scissors and crotchet were finally used, and the child delivered with great difficulty, on account of its large size and the contracted state of the patient's pelvis. After waiting an hour for its spontaneous separation, the placenta was found adherent, and required the introduction of the hand to deliver it. The uterus did not contract down in the least, but remained large and flabby and without hæmorrhage. She died in half an hour.

In *five* of the seventeen cases of the fourth position of the vertex, the

position was changed into the second of the vertex, by the physician in attendance. Three of the seventeen, occurred in two twin pregnancies.

One case of the fifth position of the vertex was converted into the first position; the labour was easy and rapid.

6. I. S. aged 26, in labour with her first child. Every thing went on as usual, until about the time the os uteri became fully dilated, when she complained of chilliness which was relieved by a little warm tea. The pains were exceedingly violent, and during one of them she gave a violent spring, and extended herself at full length on the bed. There was not the slightest sign of spasm; muscles all relaxed, and the pulse, respiration and the sounds of the heart entirely absent; pupils natural. The most energetic measures were used to restore her, but failed; a vein was opened. no blood flowed.

After being satisfied of the woman's death, the child was removed by the cæsarian section about an hour after the accident, and was dead.

Autopsy twelve hours after death. Brain and uterus perfectly healthy.

The heart exhibited extensive valvular disease of long standing. The contiguous parts of two of the semilunar valves of the aorta had been destroyed by previous disease, and a firm union taken place between their remaining portions, so that the vessel was guarded but by two valves, one natural, and the other very large, loose and much thickened. The other parts of the heart were healthy.

In one case of the anterior fontanelle presentations the woman was delivered without assistance or the position being rectified: child weighed eight and a half pounds.

7. C. C. aged 19, a short, stout Irish woman in labour with her first child. The time from the first attendance of the physician to the complete dilatation of the os uteri was nineteen hours. She had been bled once to facilitate the dilatation. At this time, owing to the length of the vagina and the mobility of the child's head, no diagnosis was made. The pains continued for three-fourths of an hour, when the membranes ruptured, after which the uterine pains rapidly diminished. Ergot was then given with the effect of increasing the pains without advancing the head much, which was found entering the superior strait soon after the waters escaped. The position was now made out, and the pains becoming pretty good, but ineffectual, and continued thus for six hours, when the attending obstetrician was sent for. During the next two hours the patient became greatly exhausted, and suffering very much from pain. Tr. opii was given, and repeated, which procured six hours rest, and very sensibly recruited her strength. Ergot was now given the second time, with decided effect; the head descended, but soon became immovably fixed. Efforts were made by the fingers and fillet to promote flexion; the forceps could not be made to lock from some difficulty in the introduction of the female blade. Tr. opii was given, and Prof. Hodge sent for, who soon arrived and took charge of the case. The foetal heart not being heard on careful auscultation, it was decided to open the head, which was

accordingly done, and after which the difficulty in introducing the female blade was found to be owing to the occipital protuberance of the child being fixed in the lesser right sacro-ischiatic foramen. The bones of the head were therefore delivered piecemeal. The head was finally delivered by the use of the blunt hook to convert the position into one of the face, and of the lever to make traction. There was next some delay in the delivery of the thorax from the right arm being engaged within the superior strait. The body was now decapitated, the blunt hook introduced and the pubic arm brought down. The sacral arm was next brought down in the same way, and the body soon after delivered by strong traction. Complete inertia of the uterus followed and the patient required stimulants. The placenta was delivered by the introduction of the hand into the uterus, which did not contract after its withdrawal. No hæmorrhage; frictions to the abdomen produced no effect. A sponge saturated with vinegar twice introduced into the uterus caused the first effort at contraction. The bandage was then applied, which with kneading the abdomen produced tolerably firm contraction. Wine-whey and nourishing food ordered for the patient, who soon fell asleep.

Duration of the labour, forty-eight hours. The child weighed nine pounds.

8. The single case of transverse position of the head (the anterior fontanelle looking to the right side of the mother) was converted into the first position of the vertex and the child safely delivered.

9. The case of the presentation of the side of the head with the occiput to the right ilium of the mother was converted into the second position of the vertex by bringing the occiput down with the lever, having first waited a number of hours to allow the contractions of the uterus, if possible, to effect the change. The delivery was then soon accomplished.

The exact positions of the shoulder presentations, although in all probability perfectly known to the gentleman in attendance, do not seem to have been recorded with care.

10. The first case is put down as having been a presentation of the left shoulder, but it is not stated in which cavity the head lay. The diagnosis was evident after the rupture of the membranes, and a number of ineffectual attempts made at version, the soft parts being but little dilated. There was also prolapsus of the cord between the arm of child and arch of pubis. The pains soon became more forcible and spontaneous *version by the pelvis* took place, this part being first delivered followed by the legs; the right arm was next delivered, and after a few pains with some traction the thorax and head.

11. The second case is given as the first position of the shoulder, the left hand preceding and presenting to the left acetabulum. After suitable preparation the child was delivered by anterior version by the feet.

Of 566 children where the presentation was known, twenty-six were presentations of the lower or pelvic extremity of the fœtal ellipse, equal to one case of pelvic presentation in twenty-one children; or supposing the thirty-two unknown cases to have been cranial presentations, as most of them undoubtedly were, the proportion of presentations of the lower extremity will have been in this series of cases, one in twenty-three children. This includes the cases of twin pregnancies. Leaving these out of the calculation the proportion of pelvic presentations (in cases of pregnancy with one child) will be one case in twenty-nine.

The proportion of pelvic presentations to the whole number in Churchill's series, was one in about twenty-one cases; in Metcalf's series, one in forty-three cases. The difference is very striking.

There are two cases recorded as being pelvic presentations. I place them with the breech presentations, and reserve the word pelvic for a general term under which to classify all presentations of the lower extremity of the fœtal ellipse.

12. The first case of breech presentation is interesting on account of being complicated with an extensive laceration of the perineum and recto-vaginal septum as follows.

The delivery of the pelvis was accomplished by the visiting accoucheur by means of the blunt hook, about twenty hours from the time of the rupture of the membranes, within an hour from the time he first saw the patient. With considerable difficulty from the unusually small size of the vagina, the lever was next introduced and the head delivered. The pulsation of the cord could not be felt after the delivery of the pelvis, and the child was born asphyxiated. It was immediately put into warm water, the mucus removed from its mouth, and frictions made to the spine with the effect of restoring its respiration.

On examination the perineum was found ruptured, the rent also extending up the septum between the vagina and rectum to the distance of three inches. The hemorrhage which followed was moderate. Upon its cessation four ligatures were introduced, so as to bring the lacerated edges together, the rectum having been first dilated by a large wax bougie and the vagina by means of a speculum.

13. The case where the feet presented in the first position. The labour was twenty-four hours duration, and accompanied with very inefficient pains and prostration of the mother. The first pains were felt at 7 A. M., and at twelve at night the membranes were ruptured; at 2 A. M. the feet and breech were delivered, when the pains ceased entirely. Ergot was given, and repeated without much effect. The neck of the uterus was contracted around the neck of the child. An anodyne was given at 3½ A. M., and the woman slept quietly the remainder of the night, while the visiting accoucheur was sent for; after his arrival, the head was soon delivered by the aid of the vectis.

14. A case of breech presentation in the first position. The woman suffered for thirty-six hours with dilating pains before the membranes ruptured. The breech advanced slowly and passed the inferior strait; the head now becoming arrested in the cavity of the pelvis the forceps were introduced to bring it away. Duration of the second stage $10\frac{3}{4}$ hours.

15. A case of the presentation of the feet in the second position. The diagnosis was made before the rupture of the membranes. The left foot was found with the heel to the right acetabulum, and the toes to the left sacro-iliac junction, while the toes of the right foot were found by passing the fingers behind and above the heel of the left foot. At twelve o'clock the membranes ruptured, and labour advanced slowly; the left foot was expelled at one o'clock. An attempt was made to bring down the right foot, but did not succeed. Every pain forced forward the left foot and leg, while the right remained fast in the vagina; the *left* hip and thigh next came down with the *right* foot. The left thigh was now pushed up, and it was found that the cord was twisted around the right leg, thus preventing its escape. It was therefore brought down, slipped over the foot and returned to the vagina. The right leg and thigh now slipped down. "Just previous to their descent, the body of the child began, and rapidly executed a rotation passing successively from the second to the fourth, the sixth, and after a slight pause to the fifth position. After the right thigh was expelled, the rotation was continued on to the first position." Labour now advanced slowly; no traction was made, yet the arms were found to have risen; the pubic and then the sacral arm was brought down by the finger. There were now no pulsations in the cord, nor could the fetal heart be heard; ergot was given to hasten labour, but without effect. Considerable delay followed, and the child being considered dead, the blunt hook was applied first in the mouth, and then in orbit, and the child finally delivered dead, four hours after the delivery of the left foot.

Twin pregnancies.—There were ten cases of twin pregnancies. The following table exhibits the position of each child, the duration of the labour, &c.

| Previous Labours | Positions | | Sex. | | Weight in lbs. ozs. | | Length in inches. | | Dur. of Lab. in hrs. | Time between delivery of the children. |
|------------------|-----------|-----|------|----|---------------------|------|-------------------|-----|----------------------|--|
| | 1st | 2d | 1st | 2d | 1st | 2d | 1st | 2d | | |
| 2 | 1 V | 2 V | m | m | 6 | 6 | | | 25½ | 6¼ h. |
| 0 | 4 V | 4 V | f | f | 3 | 2.14 | 14½ | 15½ | | 10 m. |
| 0 | 1 V | 4 V | f | f | 5.13 | 5.5 | 18 | 17½ | | 5 m. |
| 0 | 4 F | V | m | m | 5 | 5 | | | 38½ | |
| 7 | 1 V | 4 B | f | m | 6.8 | 6.12 | 19¾ | 20 | 28¾ | 4¾ h. |
| — | 1 V | 1 B | f | f | 3.12 | 3.12 | 14 | 14 | 8 | 5 m. |
| — | 1 V | 1 V | f | f | | | | | 12 | 30 m. |
| — | 2 V | 1 V | m | m | 5 | 4½ | 18 | 18 | 5½ | 5 m. |
| 1 | 1 V | 4 B | m | m | 4.12 | 4½ | 12½ | 12½ | 15½ | 30 m. |
| 6 | Feet | 3 F | f | f | 3.10 | 2.14 | 16 | 16 | 1½ | 1 h. |

The delivery in the first, second, third, sixth, seventh, eighth, and tenth cases was easy, and without any untoward circumstances of any kind.

16. The fourth case was of exceeding interest. The patient was a stout healthy Irish woman, twenty-five years of age, in labour for the first time. The first pains commenced at nine A. M. of March 1. At six A. M. March 2, the os uteri had dilated to the size of a dollar, and the feet of a child felt. At ten A. M. the feet were found in the vagina in the fourth position; (the toes presenting to the left acetabulum;) the membranes strong and unruptured; the pains had become expulsive only during the last hour. At one P. M. the waters came away, and were shortly followed by the feet. By pressure on the left hip while labour progressed, the position was changed into the second position, and in which position the pelvis and body were expelled as far as the cord, which pulsated freely. This was at two P. M. The pains now suddenly ceased; after a short delay ergot was given and repeated without effect; no contractions of the uterus followed; the child's head above the superior strait. The uterus as felt through the abdominal parietes was tense and hard. Eight ounces of blood were next drawn from the arm, but the pulse falling during its abstraction from 85 to 75, the arm was tied up. The pulsations of the cord getting more feeble, traction was made without effect, and all pulsation of the cord soon ceased; the child died. Its body so completely occupied the cavity of the pelvis that no satisfactory examination could be made. The abdomen and thorax were therefore eviscerated, and on introducing the hand, the neck was found bent backwards, strongly to the right side above the superior strait, and its chin not to be felt, while upon its neck and beneath the chin rested the occiput of a second child, occupying the left iliac cavity with its body bent to the right side of the uterus, which was strongly contracted upon its contents. The attending accoucheur and Prof. Hodge were now (five P. M.) sent for. The mother was pretty comfortable; her pulse 96, full and regular. The gentlemen arrived at 8½ P. M., and Prof. Hodge took charge of the case. He verified the diagnosis previously made. After repeated and careful examination by auscultation to ascertain the life of the second child, it was determined that it was dead. Its head was then perforated, and brought into the hollow of the sacrum. This allowed the footling to be brought down and detruncated. The second child was now delivered by the forceps, and afterwards the head of the first child. The instrumental delivery occupied two hours. In fifteen minutes the placenta came away without hemorrhage. Fifty drops of laudanum were given to the patient, who was considerably exhausted; her pulse 100, and smaller than before. The perineum was slightly ruptured early in the labour, and suffered no increase by the use of instruments.

17. The fifth case of twins. The first child was delivered without any unusual occurrence. An examination being made directly after the rupture of the membranes of the second child, it was found that there was a prolapse of the cord to the extent of six inches and pulsating; the right hand

was also below the presenting part (the breech). Ineffectual attempts were made to restore them. The pains continued good, but the child advanced slowly. The attempts made to bring down the feet failed. Finally the cord ceased pulsating, and the child was delivered $4\frac{3}{4}$ hours after the first one, dead, the head having been rotated to the second position after the birth of the child as far as the thorax.

18. The ninth case of twins. The membranes ruptured unexpectedly thirteen hours before the accession of pain; one hour after the commencement of pain the first child was born. Immediately after this, the membranes of the second child presented, and the position was made out through them. A strong pain expelled the child enveloped in the membranes, and the placenta half an hour after the delivery of the first child. The membranes were immediately ruptured, and the child at once cried. Full respiration was not established, however, until fifteen minutes afterwards. The mother and both children did well.

19. Besides the above cases where instruments were used, the vectis was once employed to facilitate delivery in a case of hemorrhage, and the blunt hook once to bring down the pelvis in the case of the fifth position of the breech.

To recapitulate them, the *head was perforated* five times as follows; three times in vertex positions on account of the rapid exhaustion of the women, and where there was difficulty in applying and locking the forceps (cases one, three, and five); once in a case of anterior fontanelle presentation where the head had become arrested (case seven); and once in a case of twins where the heads became locked (case sixteen). The *forceps* were used five times as follows: once to facilitate delivery in a case of convulsions (case 4, page 336); once to deliver the child after the death of the mother (case four); once to deliver the head in a case of breech presentation (case fourteen); and twice in a twin pregnancy (case sixteen). *Embryotomy* was performed once in a twin pregnancy (case sixteen). *The lever* was used four times, once to bring the vertex down where the side of the head presented (case nine); twice to facilitate the delivery of the head in breech presentations (cases twelve and thirteen); and once to facilitate delivery in a case of hemorrhage (case nineteen).

The blunt hook was used three times; twice to facilitate the delivery of the breech (cases 12 and 20), and once to facilitate that of the head (case 15).

Version by the feet was once performed in a case of the presentation of the left shoulder, labour premature—(case 11.)

Spontaneous version by the pelvis occurred in a shoulder presentation (case 10).

Cæsarian section was performed once upon a dead mother to deliver the child—(case 6.)

There were three cases of *prolapsus of the cord*, one in the first case of shoulder presentation, one where the breech presented (case 17); and one

in a first vertex position. In the first two cases the child was dead at delivery, and in the third it required twenty minutes to resuscitate it.

The perineum was ruptured in ten or twelve instances, all being slight cases and not requiring any particular treatment, except in case 12.

III.—*Duration of Labour*.—1. Of the first stage, from the time the woman felt any thing like active pains, until the rupturing of the membrane. This was noticed in 245 cases only, as follows;

| | |
|--------------------------------|-----------------------------|
| 2 hours and under in 22 cases. | 18 to 24 hours in 20 cases. |
| 2 to 4 hours " 23 " | 24 " 36 " " 13 " |
| 4 " 6 " " 39 " | 36 " 48 " " 2 " |
| 6 " 12 " " 73 " | 48 " 72 " " 2 " |
| 12 " 18 " " 51 " | |

2. Of the second stage, from the rupturing of the membranes to the delivery of the child; 273 cases noted.

| | |
|--------------------------------|----------------------------|
| 1 hour and under in 127 cases. | 6 to 12 hours in 19 cases. |
| 1 to 2 hours " 42 " | 12 " 18 " " 8 " |
| 2 " 4 " " 30 " | 18 " 24 " " 3 " |
| 4 " 6 " " 14 " | |

3. Of the third stage from the delivery of the child to the delivery of the placenta. It was noted in 515 cases, and lasted as follows:

| | |
|------------------------------------|------------------------------------|
| 10 minutes and under in 147 cases. | From 60 to 90 minutes in 20 cases. |
| From 10 to 15 minutes 117 " | 1½ hours to 2 hours in 11 " |
| 15 " 25 " 79 " | 2 to 3 hours " 7 " |
| 25 " 35 " 71 " | 3 " 4 " " 7 " |
| 35 " 45 " 19 " | 8½ hours " 1 " |
| 45 " 60 " 34 " | 12 " " " 2 " |

4. Total duration of labour. It was noted in 526 cases and lasted

| | |
|--------------------------------|----------------------------------|
| 3 hours and under in 77 cases. | From 24 to 36 hours in 35 cases. |
| From 3 to 6 hours in 73 " | 36 " 48 " " 13 " |
| 6 " 12 " 162 " | 48 " 72 " " 8 " |
| 12 " 18 " 95 " | 4 days " 1 " |
| 18 " 24 " 61 " | 8½ " " 1 " |

The proportion of those under six hours to the whole number is as 1 to 3·46 or 28 per cent.

5. Duration of 185 cases *not* first labours.

| | |
|--------------------------------|----------------------------------|
| 3 hours and under in 43 cases. | From 18 to 24 hours in 11 cases. |
| From 3 to 6 hours 35 " | 24 " 36 " " 9 " |
| 6 " 12 " 50 " | 36 " 48 " " 4 " |
| 12 " 18 " 30 " | 48 " 72 " " 3 " |

The proportion of those under six hours to the whole number is as 1 to 2·3 or 42 per cent.

6. Duration of first labours. Taking the 185 cases of labours not the first from the whole number in which the length of the labour was noted would leave 341 cases, *most* of which are first labours.

The duration of these was as follows:—

| 3 hours and under in 34 cases. | | | | From 24 to 36 hours in 26 cases. | | | |
|--------------------------------|---|-----|---|----------------------------------|------|----|-----|
| From 3 to 6 hours | “ | 38 | “ | 36 | “ | 48 | “ |
| 6 “ 12 “ | “ | 112 | “ | 48 | “ | 72 | “ |
| 12 “ 18 “ | “ | 65 | “ | 4 | days | “ | 1 “ |
| 18 “ 24 “ | “ | 50 | “ | 8½ | “ | “ | 1 “ |

Proportion of those under 6 hours to the whole number as 1 to 4·7 or 21 per cent., thus proving the greater length of first labours, than of subsequent ones, and showing that a woman's chance of having her labour over in six hours, is only one half as good if with her first child, as if she has borne children previously.

Upon comparing the above tables with those of Churchill, (see the last No. of the Am. Jour. of the Med. Sciences, page 176,) I find that labour is more rapid in Ireland, than here, his tables showing a larger proportion of cases of six hours and under, than occurs in this house; being there as 1 to 2·75, while here as shown by table 4, it is as 1 to 3·46.

The disparity is far greater compared with the tables of Dr. Metcalf, which give the proportion of 1 to 7·8, showing that labour is much more protracted in Mendon than in the Dublin or Philadelphia charities.

Again, respecting the cases which lasted over twenty-four hours.

Dr. Metcalf's tables show that about 15 per cent. of his cases lasted longer than this.

| | | | | | | |
|-----------------|---|---|----|---|---|---|
| Dr. Churchill's | “ | “ | 10 | “ | “ | “ |
| These records | “ | “ | 11 | “ | “ | “ |

The question at once arises, what is there in the constitutions or habits of the patients that causes this difference. Undoubtedly the better class of society from which Dr. Metcalf's statistics are drawn, the higher cultivation, refinement and delicacy of his patients, combined as these accomplishments are with want of bodily vigour and strength, will account for it in a great measure.

It will be seen that there is not the same disparity in the cases which lasted over twenty-four hours as in those of six hours and under, a result precisely such as we ought to anticipate.

III. *The Children*.—1st, *The sex*.—This was noted in 517 cases as follows: Males, 277; Females, 240.

This gives a per centage of 53 per cent. males and 47 per cent. females.

Dr. Metcalf's tables give 55 “ “ 45 “ “

Dr. Churchill's tables give 59 “ “ 41 “ “

The Report of the Registrar-General of England gives 51 per cent. males and 49 per cent. females.

2d. *Their weight*.—I took the weights of one hundred male children at full term, and averaged them, and found it to be 7 lbs. $\frac{3}{4}$ oz.

The average weight of one hundred female children obtained in the same manner was 6 lbs. 8½ oz.

The heaviest child of the *whole series* was a female, and weighed 15 lbs.

1 oz.; the lightest was also a female, one of twins, and weighed only 2 lbs. 14 oz. It lived two or three days only. Its mate weighed 3 lbs. 10 oz. and is now doing well.

There were *thirty-nine* children which weighed from $8\frac{1}{2}$ lbs. to $9\frac{1}{2}$ lbs.; *eight* of from $9\frac{1}{2}$ to $10\frac{1}{2}$ lbs.; *one* of 12 lbs. and *one* of 15 lbs. 1 oz.

3d. Their length.

Average length of 100 *male* children $19\frac{1}{10}$ inches.

“ from the vertex to the umbilicus $10\frac{1}{2}$ inches.

“ of 100 *female* children $18\frac{3}{4}$ “

“ from vertex to the umbilicus $10\frac{1}{8}$ “

The longest child measured was a male, $21\frac{1}{2}$ inches long.

“ shortest “ “ female, 16 “

4th. *Still-born Children*.—Of the 598 children, the large proportion of *fifty-four* were dead at birth, or lived only a few hours afterwards. In this number are not included a number who lived, two, three, or four days, without the ability to nurse, and thus died of inanition. I would have ascertained the exact number of these had it been possible to have done so with accuracy. I propose as far as possible, an investigation into the causes of the death of these children, and for this purpose, append the following table of the presentation, &c.

| No of cases. | Presentation. | Still Born. | Premature. | Pu- trid. | Cra- riot. | Mothers dead before delivery. | No. of cases. | Presentation. | Still Born. | Premature. | Pu- trid. | Cra- riot. |
|--------------|---------------|-------------|------------|-----------|------------|-------------------------------|---------------|---------------|-------------|------------|-----------|------------|
| 25 | 1st Vert. | 15 | 4 | 4 | 2 | | 4 | 1st breech | 2 | 1 | 1 | |
| 2 | 2d “ | 1 | | | | 1 | 4 | 2d “ | 3 | 1 | | |
| 2 | 3d “ | | 1 | | 1 | | 2 | 4th “ | 2 | | | |
| 2 | 4th “ | 2 | | | | | 1 | Feet. | | 1 | | |
| 1 | 5th “ | | | | | 1 | 2 | 1st feet. | 1 | 1 | | |
| 1 | 6th “ | | | 1 | | | 1 | 2d “ | 1 | | | |
| 1 | Ant. font. | | | | 1 | | 1 | 4th “ | | | | 1 |
| 2 | Head | 1 | | | 1 | | 1 | Unknown | | 1 | | |
| 2 | Shoulder | | 1 | 1 | | | | | | | | |
| 38 | | 19 | 6 | 6 | 5 | 2 | 16 | | 9 | 5 | 1 | 1 |

The sex of these children, as far as ascertained, was twenty females and eighteen males. If the skin be described as separating from any part of the child's body, I classed it as putrid.

The question may be asked how long must a fœtus be dead to become putrid; the only case bearing upon this is one where the mother felt the child strongly *ten* days before delivery, but which ceased to be felt after taking a dose of oil which griped her severely. The child weighed five pounds.

Of the *nineteen* still-born children where the superior extremity of the fœtal ellipse presented, in *eight* of them no cause was ascertained, nor did there any thing occur during the delivery that might lead to such a result. *Two* had the cord tightly around the neck at birth, and the face livid. In both the cord was loosened as soon as possible, and efforts made to resusci-

tate without effect. *Two* breathed after birth, but soon died, one in half an hour, and the other in five hours. *Three* were from mothers who had convulsions during labour. *One* was still-born after a labour of fifty-eight hours in a woman with venereal warts. *One* was the first of twins and "had been dead some time." *One* had its position changed from the 4th vertex to the 2d vertex during the progress of the labour, and *had the cord around its neck*. It lived half an hour and died. (Can the fact of the cord being around the neck endanger the child during such a change of position?) In *one* case ergot was given during the second stage, and repeated with effect eight and a half hours before the delivery.

The six premature children were all between six and a half and *seven and a half months children*; the date of the last menstruation was known in all except two. No cause was assigned for any of the children being putrid, except in the single case before mentioned, where the dose of oil had been taken.

There were *nine* still-born children where the breech and feet presented. *Four* thus classed lived respectively (one) one half hour, (two) fourteen and a half hours, (three and four) six hours. In the second of these there was a delay of eight minutes in the delivery of the head, until which time the cord had pulsated. The child was partially resuscitated, however, and lived thus long. *One* was complicated with prolapsus of the cord. In *two* cases there was a delay in the delivery of the head after the body was protruded, in one of an hour, in the other the time is not stated, but eventually the blunt hook was used. In *two* cases no especial cause could be given; the labours lasted respectively twenty and twenty-five hours.

Of the *four* premature children, one was from a mother subject to miscarriage; in the second the cord had ceased to pulsate just before its birth, and the heart continued to beat for fifteen minutes afterwards; in the third there was a delay of five hours in the delivery of the head after the expulsion of the body; in the fourth, the death was attributed to a fall the mother had received, whereby her left hip was bruised, and it was found that the child had a similar bruise on its hip. This, however, might have been produced by the mother, for the body of the child was delivered before the physician reached the ward.

These also were all seven months children.

The premature child, where the position was unknown, was an eight months child, and was born before the physician reached the ward.

No cause was given for the condition of the single putrid child of the pelvic presentations.

The total number of deaths in 540 cases where the superior extremity of the fœtal ellipse presented was thirty-eight, or one in fourteen cases.

The number of deaths in the twenty-six cases of pelvic presentations was fifteen, or one in one and seven-tenths. The difference is very striking, and

shows the danger to the child of pelvic presentations, and the necessity of promptness and good judgment in their management.

I do not now propose to make any classification of the alleged or supposed causes of death in these cases, although the subject is a tempting, and interesting one, as the data are not sufficient to add much to our present knowledge upon the subject.

I have been thus particular in describing the cases of still-born children, for the subject seems to me to merit serious attention. The proportion here too is very great, and I wished to account for it if possible. It is one in eleven cases. In Dr. Churchill's cases, the proportion is one in eighteen cases. Dr. Metcalf has left this point unnoticed in his paper. He speaks however, of twelve cases, which *if all*, would give one in twenty-five cases. In this twelve are not included his five cases of abortion, not a case of which was met with in the 1163 cases in the Western Lying-in Hospital, Dublin, or in the 588 cases, of which I have given a summary.

IV. *The placenta.*—It is to be regretted that more definite data respecting retention and adhesion of the placenta are not furnished by these records. I find that in the 588 cases of labour, it was found or thought necessary to introduce the hand into the uterus sixty times to bring away the placenta. Of these, thirty are put down as being cases of adhesion, twenty-two of retention, and eight times it was thus delivered on account of hemorrhage.

That there were thirty cases of adherent placenta in the above number of confinements appears improbable. The residents in attendance probably mistook retention for adhesion; and frequently too, I doubt not, introduced their hand into the uterus, where an older, and more skilful practitioner would have succeeded, without a resort to this disagreeable and painful operation.

The hand was introduced to deliver the placenta but three times, from the 452d to 588th case of the series inclusive, while from the 110th to the 246th, an equal number of cases, it was introduced no less than eighteen times.

There were two cases of hour-glass contraction of the uterus with retention. In the first the placenta not coming away in an hour and a half after the birth of the child, ergot was given and repeated, and produced such violent pain, with so little effect except in prostrating the patient, that several doses of tinct. opii were given, after which she became calm and slept. Twelve hours having elapsed since the delivery of the child, the hand was introduced and the contraction discovered at a third of the distance from the orifice to the fundus, the os uteri being very distensible. The placenta lay above the contracted portion, and was gradually seized and brought away without accident.

The other case was very similar, except no ergot was given, and the placenta was removed at the expiration of two hours from the birth of the child.

Of the seven cases where the placenta was retained over two hours and

less than three, it was brought away by the hand four times, and allowed to come away of itself three times.

Of the seven cases between three and four hours, it was delivered by the hand four times, by ergot twice, and once allowed to come away of itself.

The case at eight and a half hours was delivered by the hand. The os uteri had contracted upon it.

Of the two cases at twelve hours, one was the case above given of hour-glass contraction; and the other was where the woman begged the physician not to remove it, and he gratified her. After waiting ten hours ergot was given, and it was expelled two hours afterwards.

The number of cases where the placenta remained undelivered at the expiration of an hour from the birth of the child (48 in 515 cases), was in many cases probably, owing to the caution (perhaps indecision) of those in attendance, in interfering with the course of nature. In the report of Dr. Churchill so often referred to, but forty-seven cases of this kind occurred in 953 labours.

V. *Hemorrhage*.—Thirty cases of hemorrhage are noted. Twice it came on before the delivery of the child; fifteen times before the delivery of the placenta, and after the birth of the child; and thirteen times after the placenta had been expelled.

1st. *Hemorrhage before the birth of the child.*

The first was a case of unavoidable hemorrhage from partial placenta-prævia, the placenta projecting about half an inch over the os uteri. The hemorrhage was slight, (about eight ounces,) and as the os uteri was dilating rapidly, the membranes were ruptured and the child soon born. Profuse hemorrhage followed, which was arrested by the application of cold to the abdomen. The placenta was thrown into the vagina without farther hemorrhage, and removed.

The second was a case of accidental hemorrhage. The head had reached the inferior strait, and remained there four hours, although the pains were good. Hemorrhage then suddenly came on, which rendered it necessary to deliver the head by the aid of the lever, the body soon following, and the child alive. The hemorrhage then became alarming, and the hand was introduced to deliver the placenta, which was adherent to the anterior parietes of the uterus. This organ did not contract, and the hemorrhage continued until the cold douche to the abdomen and frictions were resorted to.

2nd. *Hemorrhage before the delivery of the placenta.*

In eight cases the hand introduced to bring the after-birth away, was the principal agent resorted to; ergot with frictions and the application of cold was trusted to, in five cases, and twice frictions and the application of cold were sufficient. The cause of the hemorrhage here is the detachment of a portion or the whole of the placenta, and it may come on immediately after the delivery of the child, as in the first case cited under this head, or later as in the second case.

M. C. in labour with her fourth child. The last four or five pains before its expulsion, were extremely severe, and the child was rapidly delivered. Before the cord could be delivered, the blood was heard to trickle from the woman. The uterus was immediately grasped by the hand upon the abdomen, which caused a fresh flow of blood. Two fingers were passed into the vagina, and the placenta found presenting at the os uteri, but not extruded; traction was made upon the cord, and with the assistance of the fingers in the vagina, and the bearing down efforts of the woman, it was soon brought down so that a finger could be hooked into it, and thus soon delivered. A towel wet in cold water was applied to the hypogastric region, and ten grains of ergot administered to secure contraction. All did not occupy over six or eight minutes, yet two pints of coagula were collected from the bed, which in addition to the blood that soaked into the bed and clothes must have made at least two quarts, that this woman lost in this short space of time.

In the second case, half an hour after the delivery of the child, the placenta remaining, the uterus began to fill with blood, dilate under the hand, and then would empty itself. Thus it went on until the violence of the symptoms rendered it necessary to introduce the hand into the uterus, when the placenta was found adherent in about four inches of its circumference to the fundus of the uterus. It was detached and removed, and the hemorrhage soon ceased on the application of cold, and the exhibition of ergot.

3d. *Hemorrhage after the delivery of the placenta.*

The thirteen cases of hemorrhage, after the expulsion of the placenta, may be divided into two varieties, requiring however the same treatment. The first is that where the discharge of blood is continuous from the uterine vessels from a disposition of the uterus to relax, or from inertia, the degree of which may of course vary, and the hemorrhage be correspondingly profuse or moderate. The second is that where the blood accumulates in the uterus until it becomes largely dilated, and is thus stimulated to contract and expel it. The term concealed hemorrhage is given to this variety. The following two cases are instances of it.

1. The physician had left the woman for an hour when he was called on account of his patient fainting. He found the uterus at the umbilicus. The application of cold cloths caused the expulsion of nearly forty ounces of coagula. The uterus again dilated, and she fainted the second time. The cold douche was made to the abdomen, followed by cold cloths, friction and the removal of all coagula from the vagina. Ergot was finally given to secure the contraction thus produced.

2. The patient had been left half an hour when the physician was again sent for; the uterus had become as large as before delivery. Cold water was poured upon the abdomen, all clots carefully removed from the vagina, and the wine of ergot administered.

The *remedies* employed in these cases to restrain the hemorrhage, were the following;

1st. Those applied externally: *a.* Frictions to the abdomen by rubbing, grasping or kneading; *b.* cold applications by cold wet cloths, or by ice enclosed in cloths; *c.* cold water poured upon the abdomen from a height; *d.* the application of a compress and roller or bandage.

2d. Those applied per vaginam. *a.* the introduction of the hand; *b.* the introduction into the uterus of a sponge wet with vinegar, or cold vinegar and water; *c.* ice applied to the vagina; *d.* the removal of all clots from the vagina.

3d. Those given internally. *a.* Ergot; *b.* plumbi-acetas; *c.* cold drinks.

4th. The horizontal position, with the hips elevated and the head low.

VI. *Convulsions*.—There were thirteen cases of convulsions which occurred during the progress of labour; of these, four were epileptic; four apoplectic; one seemed to have been hysterical complicated with epilepsy; one partly cataleptic and partly epileptic, and there were three where the form was not noted.

Eight of these cases occurred during the dilatation of the os uteri, either very early in this stage or towards its close; three times the head had advanced to the inferior strait; and once only was it in the cavity of the pelvis when the attack came on. In one case the stage of labour at which it occurred, is not noticed.

In nine cases it was the first labour; twice this point was not noted, but they both were probably first labours; one was the fourth labour, and one the second.

1st. *Of the epileptic cases*.—Two of the four cases had been subject to epilepsy before the present attack. The attack in the first case was so slight that no treatment was required, and in two, a single bleeding sufficed to stop them.

The fourth case was more severe.

The first convulsion came on during the progress of the dilatation of the os uteri. An hour afterwards there was a second attack with spasms of the right leg and both arms, which lasted five minutes; pulse small. Half an hour afterwards there was a third attack more violent than the preceding, closely resembling epilepsy, lasting fifteen minutes, and affecting the whole body. After the spasmodic action of the muscles had subsided, the breathing became stertorous; pulse regular, stronger than before; complains of pain in the head. V. S. $\bar{\text{xxxvi}}$. As soon as the os uteri was fully dilated the forceps were applied, and the head brought to the inferior strait, when the instruments were withdrawn. A few minutes after this, and about six hours from the last attack, she had a fourth convulsion more violent than any heretofore, and during which $\bar{\text{xx}}$ of blood was drawn. At the end of this paroxysm, a violent uterine contraction came on which expelled the child before sufficient support could be given to the perineum, and it was ruptured to the sphinc-

ter. The child was alive and weighed nine pounds. The woman remained somewhat dull and stupid, and after the exhibition of an anodyne inclined to sleep. Five hours after the birth of the child she had a fifth attack. No farther report of the case is recorded. What would have been the effect here of revulsives to the extremities, and especially of cold to the head if it had been kept constantly applied during the interval of six hours between the third and fourth attacks? Was the application of the forceps justifiable when the labour was proceeding so quietly?

The four apoplectic cases are here given.

1. In the first one the head had reached the cavity of the pelvis, the patient having been very restless and almost unmanageable, when she was attacked by a violent apoplectic convulsion, for which she was immediately bled ℥xxv . It soon passed off, and she became conscious. An hour after a second one came on, for which she was again bled to the extent of ℥x . The uterine contractions became more efficient after this, and in an hour and three-quarters the child was born.

2. The head had reached the inferior strait when a convulsion came on, which left her comatose, with stertor. V. S. ℥xviii . Had now an attack with each of the three pains, which together sufficed to expel the child. For several days after delivery, suffered from pain in the head, with dimness of vision.

3. This was an exceedingly interesting case from the violence and frequency of the convulsions, and it is to be very much regretted that greater care was not given to the recording of it.

The first convulsion came on a short time before the full dilatation of the os uteri, and until she was bled, recurred every five minutes. V. S. ℥xviii ; sinapisms to the feet; cups to the spine; an enema of assafœtida; the following mixture to be given every hour: ℞ . spts. ether. sulph. comp. ℥i ; tr. valerian; ℥ss ; mist. assafœtida ℥ss . M. These measures stopped them for an hour, by which time the child's head had reached the cavity of the pelvis, and the pains good; the patient could not be prevailed upon to bear down. The convulsions now recurred every fifteen minutes for three hours until the child was delivered, and were very violent in character. The patient was then somewhat stupid, pulse at first small and frequent, but soon increased in force and became less frequent, and she gradually recovered consciousness during the next hour when the convulsions returned, and continued at intervals of about three-fourths of an hour for five hours. Her head was shaved, and cold applied to it; she had leeches to the temples, sinapisms to the feet, and various antispasmodics; perfect rest was enjoined. Five hours after the last convulsion, she was in a quiet sleep, with a pulse of 110, rather firm, skin warm.

In twelve days she was well. Duration of the first stage, seven hours; of the second, four hours; of the third, fifteen minutes.

4. The last case was that of a woman who was bled ℥xii . during the first

stage on account of a tendency of blood to the head with headache, and a total loss of sight. Five hours after this bleeding, she had an apoplectic convulsion for which she was again bled ℥xx. , had cups to the nuchæ, and leeches to the temples, and cold applications made to the head. The membranes were ruptured soon after this, and in six hours she was delivered; her blindness still continuing; the pupils natural. She was quite restless during the labour, and did not seem to recognize any of those about her, except the nurse. She was placed in a dark room, had dry cups to the temples and the cold applications continued. The next morning at daylight (twenty-four hours from the time she lost it) her sight returned, and she was found then to be perfectly unconscious of any thing that occurred during her confinement, and she could never afterwards recall a single occurrence, nor remember a single pain that she suffered during that tedious day.

The following is the case of hysterical convulsions complicated with epilepsy. The patient was a young woman with her first child, and had been subject to hysteria during her pregnancy.

March 2d, 1½ A. M.—Has been in pain several hours; os uteri not at all dilated. The spasms are irregular, and the most violent appear to coincide with the pains. She lies with her eyes either shut or partially open, the balls turned up, pupils contracted, and the countenance either horribly distorted or frowning. At intervals of about five minutes the muscles became rigid; the body bent backwards, the hands firmly clenched, respiration very infrequent and each inspiration accompanied by a deep singultus. She froths much at the mouth, and at times endeavours to bite herself and others. The passing off of the pain is marked by strong rigors, approaching sometimes to convulsions. The skin is cool; pulse 85, small and easily compressed; face somewhat flushed, and during the paroxysms the veins of the neck became extremely turgid. She was bled ℥xvi. had purgative enema and the cold douche to the head, and the following mixture every half hour; $\text{℞. aq. camph., mist. assafœtid. āā f℥ss., vin. antim. gtt. xv. M.}$ These remedies had for a time some effect, especially the cold douche; the spasms became less frequent and violent, and she spoke several times. About noon she was no better; bled again ℥viii. , had sinapisms to the extremities and an injection of camphor and assafœtida. Became more quiet and tolerably comfortable.

March 3d.—Has been more or less hysterical all the morning; jactitation constant, with frequent moaning and occasional subsultus; pains inefficient; os uteri not at all dilated. Continue the mist. assafœtida.

March 4th.—Slept none last night: os uteri now dilating freely; the labour terminated favourably, at 3 P.M., without further convulsions.

The following is the case described as being one of "fits of a peculiar character, in some respects resembling catalepsy and in others epilepsy." They first appeared about a week before labour, and recurred frequently. Various anodyne and antispasmodic remedies were given, and counter-irritation made without any benefit, until the following mixture was hit upon, and which

had "the happiest effect." R. Tr. valer. ammon. $\mathfrak{z}\text{i}$.; tr. opii acet. gtt. xlviiii .; camph. gr. xxxvi .; ext. hyoscyam. gr. xii .; sacch. alb.; acaciæ mucilag. $\text{āā q. s. ft. mist. } \mathfrak{Z}\text{vi}$.—S. A teaspoonful every hour. By this the *fits* were stopped, and returned only when it was neglected. The labour was got through with safely.

The *first* of the three cases where the character of the convulsions is not given, was interesting principally for the loss of mind the woman experienced for forty-eight hours, during which time she could not be made to comprehend that her child was still-born. The case seems to have been one of stupor, or congestion of the brain rather than of convulsions.

In the second case the woman had two attacks, one before, and one soon after the birth of the child. She remained insensible some time after the first convulsion. She was bled after each attack, $\mathfrak{Z}\text{xx}$. and $\mathfrak{Z}\text{xv}$. respectively, and after the last bleeding took tr. opii gtt. xl .

In the third case the convulsions were very slight and relieved by the tr. assafœtida; indeed, had it not been recorded as a case of convulsions by the residents in attendance, I should not have given it a place under this head.

ART. V.—*On the Congestive Fever of Mississippi, with Cases.* By
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Congestive fever is so common a disease in this section of country, and its symptoms are so strongly marked, that it is almost as well known to the planter as to the physician. It has not, however, prevailed to any extent in many parts of the Union, and a short sketch of its history as it occurs here in its most usual form, with a detail of a few cases, may not be unacceptable to some of your readers. For the last twelve years it has prevailed as an endemic in this state and Louisiana, and perhaps in some of the other southern states. When it first appeared, it proved fatal in nearly every case, causing a degree of terror at its approach unequalled, except by that produced by the cholera. It is now in a great measure disarmed of its mortality, proving fatal in not more than one case in twelve or fifteen under proper treatment timely administered. It usually prevails from June to October, all ages and temperaments being liable to its attacks. Children under ten years of age are comparatively free from its ravages, and persons from twenty to thirty are most subject to it.

Congestive fever makes its approach in rather a gradual manner; the patient often complaining for several days of uneasy feelings, is taken perhaps with fever attended with severe pains in the back, knees, and limbs, and some-